904 - SEEDING

904.1 DESCRIPTION

This work shall consist of the furnishing and planting of seed at those locations indicated on the plans or as designated by the Engineer.

Permanent seeding shall be used to establish perennial vegetation during final stabilization.

Temporary seeding shall be used to provide interim stabilization with annual vegetation as a temporary cover to minimize erosion.

All materials, bed preparation, and planting shall conform to the applicable requirements of Sections 902, 903, 904, 905 and 2103 of the Standard Specifications, except as otherwise modified herein. In general, all disturbed areas should have a minimum of 6 inches of select topsoil uniformly placed. All disturbed areas shall be seeded as soon as practicable. Due to invasiveness, Crownvetch (Coronilla varia) shall not be used.

904.2 CONSTRUCTION REQUIREMENTS FOR PERMANENT SEEDING

a. Seeding Season

Determine seeding rate and season using the following table. Any seeding done outside of the seeding season as specified in the Standard Specifications will be maintained by the Contractor until satisfactory growth is established or reseeding shall be done at the Contractor's expense if the growth is unsatisfactory.

Seed Type	Minimum Pure Live Seed (%)	Rate of Pure Live Seed (lbs/acre)	Seeding Dates
Cool Season Grasses			E 1 15 A 1100
Fescue	83	348	Feb 15 – April 20 and
Kentucky Bluegrass	64	120	Aug 15 – Sept 30
Warm Season Grasses			
and Wildflowers	72	45	Nov 15 – June 1

b. Preparation of Seedbed

All areas to be seeded shall be tilled to a minimum of 4 to 6 inches before application of seed. The final seedbed shall be well mixed with no large clumps of any kind and shall have no foreign material in it. The seedbed should be uniform and well packed. **Approval of the seed bed shall be obtained from the Engineer before seeding is started.**

c. Seeding

Seed shall be applied within 24 hours of seedbed preparation by use of an acceptable seed drill or other equipment approved by the Engineer at a depth of 1/4 inch in a uniform manner at the prescribed rate. Broadcasting and hand raking to a depth of 1/4 inch will only be used on areas where it is impossible to operate a seed drill.

d. Mulching

Mulch shall be applied within 24 hours following the seeding operation. Vegetative type mulch shall be spread uniformly in a continuous blanket at the rate of 2 tons per acre resulting in 90% coverage. Application shall be by mechanical spreader or other approved means. The mulch shall be anchored in the soil to a depth of three inches by a mulch puncher or straight serrated coulter disk mulch anchor machine designed to force the mulch into the soil surface. The machine shall be weighted and operated in such manner to secure the mulch firmly in the ground to form a soil-binding mulch and prevent loss or bunching by wind. The coulters shall be at least ten inches in diameter. Two passes may be required to

anchor the mulch to the satisfaction of the Engineer. No mulch shall be placed unless it can be anchored on the same day.

e. Hydraulic Erosion Control

Shall meet the requirements found in the Temporary Erosion and Pollution Control Special Provision.

f. Fertilizer

Starter fertilizer shall be an approved commercial brand composed of a mixture of soluble and insoluble Nitrogen and shall conform to the State Fertilizer Laws. It shall be uniform in composition, dry and free flowing, and shall be delivered to the site guaranteed analysis. Certification shall be submitted to the city on the fertilizer. Any fertilizer which becomes caked or otherwise damaged, making it unsatisfactory for use, will not be accepted. Fertilizer shall be placed prior to seeding and incorporated into top soil at a rate of application of 1 lb. of actual nitrogen per 1000 square feet of planting area unless otherwise determined by a soil test. No fertilizer shall be used when seeding the banks of sediment basins or sediment traps.

g. Seed Maintenance and Acceptance

All seeded areas shall be maintained by the Contractor prior to acceptance by the Engineer. Prior to acceptance, seeded areas shall be kept free of weeds in accordance with Weed Control paragraph in "General Requirements". The Engineer will issue a written notification of acceptance once a stand of perennial vegetation free of weeds is present that has a 70% density that covers all of the disturbed area, as measured by the Engineer.

904.3 MEASUREMENT AND PAYMENT

The Engineer will measure the seed of specified type by the acre of accepted vegetation. Payment for "Seed" at the contract unit price bid is full compensation for the specified work. No separate payment will be made for fertilizer or mulching.